

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/806,080

DATE: 04/16/2001  
TIME: 10:33:02

Input Set : A:\CPG.PTO.txt  
Output Set: N:\CRF3\04162001\I806080.raw

3 <110> APPLICANT: Jomaa, Hassan  
5 <120> TITLE OF INVENTION: Gene des 1-Desoxy-D-xylulose-Biosynthesewegs  
7 <130> FILE REFERENCE: 15696  
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/806,080  
C--> 10 <141> CURRENT FILING DATE: 2001-03-22  
12 <150> PRIOR APPLICATION NUMBER: DE19923567.8  
13 <151> PRIOR FILING DATE: 1999-05-22  
15 <150> PRIOR APPLICATION NUMBER: DE19843279.8  
16 <151> PRIOR FILING DATE: 1998-09-22  
18 <160> NUMBER OF SEQ ID NOS: 6  
20 <170> SOFTWARE: PatentIn Ver. 2.1  
22 <210> SEQ ID NO: 1  
23 <211> LENGTH: 1467  
24 <212> TYPE: DNA  
25 <213> ORGANISM: Plasmodium falciparum  
27 <220> FEATURE:  
28 <221> NAME/KEY: CDS  
29 <222> LOCATION: (1)..(1467)  
31 <220> FEATURE:  
32 <221> NAME/KEY: gene  
33 <222> LOCATION: (1)..(1467)  
35 <220> FEATURE:  
36 <221> NAME/KEY: mRNA  
37 <222> LOCATION: (1)..(1467)  
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42 1 5 10 15  
44 aat gat tta gta ata aat aat aca tca aaa tgt gtt tcc att gaa aga 96  
45 Asn Asp Leu Val Ile Asn Asn Thr Ser Lys Cys Val Ser Ile Glu Arg  
46 20 25 30  
48 aga aaa aat aac gca tat ata aat tat ggt ata gga tat aat gga cca 144  
49 Arg Lys Asn Asn Ala Tyr Ile Asn Tyr Gly Ile Gly Tyr Asn Gly Pro  
50 35 40 45  
52 gat aat aaa ata aca aag agt aga aga tgt aaa aqa ata aag tta tgc 192  
53 Asp Asn Lys Ile Thr Lys Ser Arg Arg Cys Lys Arg Ile Lys Leu Cys  
54 50 55 60  
56 aaa aag gat tta ata gat att ggt gca ata aag aaa cca att aat gla 240  
57 Lys Lys Asp Leu Ile Asp Ile Gly Ala Ile Lys Lys Pro Ile Asn Val  
58 65 70 75 80  
60 gca att ttt gga agt act ggt agt ata ggt acg aat gct tta aat ata 288  
61 Ala Ile Phe Gly Ser Thr Gly Ser Ile Gly Thr Asn Ala Leu Asn Ile  
62 85 90 95  
64 ata agg gag tgt aat aaa att gaa aat gtt ttt aat gtt aaa gca ttg 336  
65 Ile Arg Glu Cys Asn Lys Ile Glu Asn Val Phe Asn Val Lys Ala Leu  
66 100 105 110  
68 tat gtg aat aag agt gtg aat gaa tta tat gaa caa gct aga gaa ttt 384



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134 370 375 380  
 136 cag gtt tca act ctt aca ttt cat aaa cct tct tta gaa cat ttc ccg 1200  
 137 Gln Val Ser Thr Leu Thr Phe His Lys Pro Ser Leu Glu His Phe Pro  
 138 385 390 395 400  
 140 tgt att aaa tta gct tat caa gca ggt ata aaa gga aac ttt tat cca 1248  
 141 Cys Ile Lys Leu Ala Tyr Gln Ala Gly Ile Lys Gly Asn Phe Tyr Pro  
 142 405 410 415  
 144 act gta cta aat gcg tca aat gaa ata gct aac aac tta ttt ttg aat 1296  
 145 Thr Val Leu Asn Ala Ser Asn Glu Ile Ala Asn Asn Leu Phe Leu Asn  
 146 420 425 430  
 148 aat aaa att aaa tat ttt gat att tcc tct ata ata tcg caa gtt ctt 1344  
 149 Asn Lys Ile Lys Tyr Phe Asp Ile Ser Ser Ile Ile Ser Gln Val Leu  
 150 435 440 445  
 152 gaa tct ttc aat tct caa aag gtt tcg gaa aat agt gaa gat tta atg 1392  
 153 Glu Ser Phe Asn Ser Gln Lys Val Ser Glu Asn Ser Glu Asp Leu Met  
 154 450 455 460  
 156 aag caa att cta caa ata cat tct tgg gcc aaa gat aaa gct acc gat 1440  
 157 Lys Gln Ile Leu Gln Ile His Ser Trp Ala Lys Asp Lys Ala Thr Asp  
 158 465 470 475 480  
 160 ala tac aac aaa cat aat tct tca tag 1467  
 161 Ile Tyr Asn Lys His Asn Ser Ser  
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 165 <210> SEQ ID NO: 2  
 166 <211> LENGTH: 488  
 167 <212> TYPE: PRT  
 168 <213> ORGANISM: Plasmodium falciparum  
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 174 Asn Asp Leu Val Ile Asn Asn Thr Ser Lys Cys Val Ser Ile Glu Arg  
 175 20 25 30  
 177 Arg Lys Asn Asn Ala Tyr Ile Asn Tyr Gly Ile Gly Tyr Asn Gly Pro  
 178 35 40 45  
 180 Asp Asn Lys Ile Thr Lys Ser Arg Arg Cys Lys Arg Ile Lys Leu Cys  
 181 50 55 60  
 183 Lys Lys Asp Leu Ile Asp Ile Gly Ala Ile Lys Lys Pro Ile Asn Val  
 184 65 70 75 80  
 186 Ala Ile Phe Gly Ser Thr Gly Ser Ile Gly Thr Asn Ala Leu Asn Ile  
 187 85 90 95  
 189 Ile Arg Glu Cys Asn Lys Ile Glu Asn Val Phe Asn Val Lys Ala Leu  
 190 100 105 110  
 192 Tyr Val Asn Lys Ser Val Asn Glu Leu Tyr Glu Gln Ala Arg Glu Phe  
 193 115 120 125  
 195 Leu Pro Glu Tyr Leu Cys Ile His Asp Lys Ser Val Tyr Glu Glu Leu  
 196 130 135 140  
 198 Lys Glu Leu Val Lys Asn Ile Lys Asp Tyr Lys Pro Ile Ile Leu Cys  
 199 145 150 155 160  
 201 Gly Asp Glu Gly Met Lys Glu Ile Cys Ser Ser Asn Ser Ile Asp Lys  
 202 165 170 175

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204 Ile Val Ile Gly Ile Asp Ser Phe Gln Gly Leu Tyr Ser Thr Met Tyr  
205 180 185 190  
207 Ala Ile Met Asn Asn Lys Ile Val Ala Leu Ala Asn Lys Glu Ser Ile  
208 195 200 205  
210 Val Ser Ala Gly Phe Phe Leu Lys Lys Leu Leu Asn Ile His Lys Asn  
211 210 215 220  
213 Ala Lys Ile Ile Pro Val Asp Ser Glu His Ser Ala Ile Phe Gln Cys  
214 225 230 235 240  
216 Leu Asp Asn Asn Lys Val Leu Lys Thr Lys Cys Leu Cln Asp Asn Phe  
217 245 250 255  
219 Ser Lys Ile Asn Asn Ile Asn Lys Ile Phe Leu Cys Ser Ser Gly Gly  
220 260 265 270  
222 Pro Phe Gln Asn Leu Thr Met Asp Glu Leu Lys Asn Val Thr Ser Glu  
223 275 280 285  
225 Asn Ala Leu Lys His Pro Lys Trp Lys Met Gly Lys Lys Ile Thr Ile  
226 290 295 300  
228 Asp Ser Ala Thr Met Met Asn Lys Gly Leu Glu Val Ile Glu Thr His  
229 305 310 315 320  
231 Phe Leu Phe Asp Val Asp Tyr Asn Asp Ile Glu Val Ile Val His Lys  
232 325 330 335  
234 Glu Cys Ile Ile His Ser Cys Val Glu Phe Ile Asp Lys Ser Val Ile  
235 340 345 350  
237 Ser Gln Met Tyr Tyr Pro Asp Met Gln Ile Pro Ile Leu Tyr Ser Leu  
238 355 360 365  
240 Thr Trp Pro Asp Arg Ile Lys Thr Asn Leu Lys Pro Leu Asp Leu Ala  
241 370 375 380  
243 Gln Val Ser Thr Leu Thr Phe His Lys Pro Ser Leu Glu His Phe Pro  
244 385 390 395 400  
246 Cys Ile Lys Leu Ala Tyr Gln Ala Gly Ile Lys Gly Asn Phe Tyr Pro  
247 405 410 415  
249 Thr Val Leu Asn Ala Ser Asn Glu Ile Ala Asn Asn Leu Phe Leu Asn  
250 420 425 430  
252 Asn Lys Ile Lys Tyr Phe Asp Ile Ser Ser Ile Ile Ser Gln Val Leu  
253 435 440 445  
255 Glu Ser Phe Asn Ser Gln Lys Val Ser Glu Asn Ser Glu Asp Leu Met  
256 450 455 460  
258 Lys Gln Ile Leu Gln Ile His Ser Trp Ala Lys Asp Lys Ala Thr Asp  
259 465 470 475 480  
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262 485  
266 <210> SEQ ID NO: 3  
267 <211> LENGTH: 3872  
268 <212> TYPE: DNA  
269 <213> ORGANISM: Plasmodium falciparum  
271 <220> FEATURE:  
272 <221> NAME/KEY: CDS  
273 <222> LOCATION: (126)..(3740)  
275 <220> FEATURE:  
276 <221> NAME/KEY: gene

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277 <222> LOCATION: (1)..(3870)  
279 <220> FEATURE:  
280 <221> NAME/KEY: mRNA  
281 <222> LOCATION: (1)..(3870)  
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286 aataatatc taaatttacc ttccgttttt gctcgatctt ctcatcttctg tticagcttt 120  
288 tatca atg att ttt aat tat gtg ttt ttt aag aac ttt gta cca gtt gtt 170  
289 Met Ile Phe Asn Tyr Val Phe Phe Lys Asn Phe Val Pro Val Val  
290 1 5 10 15  
292 cta tac att ctg ctt ata ata tat att aac tta aat ggc atg aat aat 218  
293 Leu Tyr Ile Leu Leu Ile Ile Tyr Ile Asn Leu Asn Gly Met Asn Asn  
294 20 25 30  
296 aaa aat caa ata aaa aca gaa aaa att tat ata aag aaa ttg aat agg 266  
297 Lys Asn Gln Ile Lys Thr Glu Lys Ile Tyr Ile Lys Lys Leu Asn Arg  
298 35 40 45  
300 ttg tca agg aaa aat tcy tta tgt agt tct aaa aat aaa ata gca tgc 314  
301 Leu Ser Arg Lys Asn Ser Leu Cys Ser Ser Lys Asn Lys Ile Ala Cys  
302 50 55 60  
304 ttg ttc gal ata gga aat gal gat aat aga aat acg aca tat ggc tat 362  
305 Leu Phe Asp Ile Gly Asn Asp Asp Asn Arg Asn Thr Thr Tyr Gly Tyr  
306 65 70 75  
308 aat gtg aat gtt aaa aat gat gat att aat tcc tta cta aaa aat aat 410  
309 Asn Val Asn Val Lys Asn Asp Asp Ile Asn Ser Leu Leu Lys Asn Asn  
310 80 85 90 95  
312 tat agt aat aaa ttg tac atg gat aag agg aaa aat att aat aat gta 458  
313 Tyr Ser Asn Lys Leu Tyr Met Asp Lys Arg Lys Asn Ile Asn Asn Val  
314 100 105 110  
316 att agt act aat aaa ata tct ggg tcc att tca aat att tgt agt aga 506  
317 Ile Ser Thr Asn Lys Ile Ser Gly Ser Ile Ser Asn Ile Cys Ser Arg  
318 115 120 125  
320 aat caa aaa gaa aat gaa caa aaa aga aat aaa caa aga tgt tta act 554  
321 Asn Gln Lys Glu Asn Glu Gln Lys Arg Asn Lys Gln Arg Cys Leu Thr  
322 130 135 140  
324 caa tgt cac act tat aat atg tca cat gaa cag gac aaa cta gct aat 602  
325 Gln Cys His Thr Tyr Asn Met Ser His Glu Gln Asp Lys Leu Ala Asn  
326 145 150 155  
328 gat aat aat agg aat aat aaa aag aat ttt aat tta tta ttt ata aat 650  
329 Asp Asn Asn Arg Asn Asn Lys Lys Asn Phe Asn Leu Leu Phe Ile Asn  
330 160 165 170 175  
332 tat ttt aat ttg aaa cga atg aaa aat tct ctt cta aat aaa gac aat 698  
333 Tyr Phe Asn Leu Lys Arg Met Lys Asn Ser Leu Leu Asn Lys Asp Asn  
334 180 185 190  
336 ttc ttt tac tgt aaa gaa aaa aaa ttg tca ttt ctg cat aag gcc tat 746  
337 Phe Phe Tyr Cys Lys Glu Lys Lys Leu Ser Phe Leu His Lys Ala Tyr  
338 195 200 205  
340 aaa aaa aaa aat tgc act ttt caa aat tat agt tta aaa aga aaa tct 794  
341 Lys Lys Lys Asn Cys Thr Phe Gln Asn Tyr Ser Leu Lys Arg Lys Ser  
342 210 215 220

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/806,080

DATE: 04/16/2001

TIME: 10:33:04

Input Set : A:\CPG.PTO.txt

Output Set: N:\CRF3\04162001\I806080.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

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